

The prevalence of musculoskeletal disorders among nurses working in emergency department

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Abstract

Introduction: Musculoskeletal disorders can be associated with various physical and psychological disorders for the affected individuals.

Objectives: In the present study, the prevalence of musculoskeletal disorders among nurses working in emergency departments was studied.

Methods: The study was conducted in three teaching hospitals affiliated to Qazvin University of Medical Sciences (2018-2019). Musculoskeletal disorders were studied among 100 nurses working in the emergency department using Nordic questionnaire. Collected data were then analyzed using SPSS version 16.

Results: A total number of 100 nurses participated in this study. Among them, 83 of them were female. The mean age of participants was 28.7 ± 6.2 years. The most prevalent musculoskeletal disorders were in the lumbar region (67%) and then in the neck, knees and shoulders, respectively. The results also showed that rest, decreased activity, leaving the workplace, or inability to perform activity at work or home was occurred after musculoskeletal disorders (30%). No significant relationship between demographic variables and the prevalence of musculoskeletal disorders was observed ($p > 0.05$).

Conclusion: The present study showed that prevalence of musculoskeletal disorders among emergency nurses is high. Given the fact that a significant portion of hospital care services is provided by nurses, their physical health should always be considered by managers and policy makers and the necessary measures should be taken into account in this regard.

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Introduction

Work-related musculoskeletal disorders refer to injuries in a person caused by factors associated with work that may occur in muscles, ligaments, bones, joints and tendons (1). Musculoskeletal disorders are one of the main reasons for disability among health and medical staff (2). In many developed countries, such injuries are considered as an occupational health priority. Physically, nursing is a challenging occupation (3), therefore, the risk of musculoskeletal disorders among nurses is high (3-6). In fact, the physical health of nurses is highly important, since physical injuries can lead to feelings of tension in them. Occurrence of physical disorders among nurses can lead to physical disabilities, disruption in daily activities, emotional problems, multiple occupational problems, and ultimately an increase in direct and indirect costs of healthcare systems. Therefore, paying attention to their health is a necessity. For corrective interventions, having epidemiologic information about the problem is essential, therefore, it is necessary

to conduct accurate epidemiological studies to improve the situations (7). In addition to physical symptoms, the occurrence of musculoskeletal disorders can be associated with many other complications for healthcare workers. For instance, a study in 2017 showed that the occurrence of musculoskeletal disorders in hospital staff significantly reduced their quality of life (8). Bazazan et al reported that an increase in musculoskeletal disorders among nurses could have a negative impact on their satisfaction with their occupation (9). The results of another study have also shown that the occurrence of musculoskeletal disorders could negatively affect the quality of services provided to the patient (10). On the whole, the performance of hospital staff has a significant impact on the health of community as well. Among the hospital staff, the emergency staff, due to the specific nature of their work, are more exposed to stresses caused by emergency situations and related factors, which can affect the quality of their work and consequently the productivity of the organization. The physical stresses in the